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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,990

06/22/2006

Naoki Tomoguchi

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11/07/2008

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EXAMINER

HON, SOW FUN

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

11/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,990	Applicant(s) TOMOGUCHI ET AL.	
	Examiner SOPHIE HON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/26/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-4, 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claim 5 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/26/08.

Response to Amendment

Withdrawn Rejections

2. The objections to claims 1-4, 6-9 are withdrawn due to Applicant's amendment dated 6/26/08.
3. The 35 U.S.C. 102(b) and 103(a) rejections of claims 1-4, 6, 8-9 are withdrawn due to Applicant's amendment dated 6/26/08.

New Rejections

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3-4, 6, 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saiki (US 2002/0075428) in view of Brill (US 3,017,282).

Regarding claims 1, 3-4, Saiki teaches an adhesive containing a polyvinyl alcohol-based resin having an acetoacetyl group and a crosslinking agent which has to be water soluble ([0035]) since the adhesive is an aqueous solution ([0042]). Saiki

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teaches that an acid is added to the aqueous solution as the crosslinking agent for the polyvinyl alcohol-based resin ([0035]), but fails to disclose the pH of the aqueous solution, let alone one that is in the specific range of from 2.2 to 4.3.

However, Brill teaches that acid-containing aqueous solutions with a pH in the range of between 2.5 and 4.5 (column 1, lines 50-55), which contains the claimed range of 2.2 to 4.3, are useful in the preparation of surface coatings for the purpose of conditioning a surface for adhesion with other materials (column 1, lines 50-60), and not just to crosslink polyhydroxy compounds (column 1, lines 55-60) of which polyvinyl alcohol is a species.

Therefore, since Saiki is silent regarding the acidity and hence pH of the aqueous solution, it would have been necessary and hence obvious to have looked to the prior art for suitable values. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the aqueous adhesive solution of Saiki with a pH that is in the range of from 2.2 to 4.3, in order to condition the surface of the material for adhesion with other materials as well as to crosslink the polyvinyl alcohol in the adhesive, as taught by Brill.

In addition, Saiki teaches that the adhesive is used for forming an adhesive layer (layer of adhesive made of a vinyl alcohol-based polymer, [0031]) in a polarizing plate in which a polarizer and a transparent protective film are adhering with each other via the adhesive layer, wherein the polarizer is a polyvinyl alcohol-based polarizer (polarizing film, [0031]). It is noted that these features are intended use ones, and thus not positively recited.

Regarding claim 6, Saiki teaches a polarizing plate comprising a polarizer and a transparent protective film which is provided on at least one surface of the polarizer via the adhesive layer (adhered to one side or both sides, [0031]) described above.

Regarding claim 8, Saiki teaches an optical film comprising at least one polarizing plate (polarizer used as an optical member that is laminated onto another optical layer, [0043]), wherein the polarizing plate is the one described above.

Regarding claim 9, Saiki teaches an image display comprising the polarizing plate described above (liquid crystal display, [0065]).

Regarding claims 10-11, Saiki fails to teach that the acid is an organic acid, let alone acetic acid.

However, Brill teaches that an organic acid such as acetic acid can be used in lieu of an inorganic acid (column 1, lines 65-70) for the purpose of providing the desired priming of the surface of the material for adhesion to other materials and the desired crosslinking of the polyhydroxy compound (column 1, lines 50-60) of which polyvinyl alcohol is a species.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an organic acid such as acetic acid in lieu of the inorganic acid in the aqueous adhesive solution of Saiki, in order to obtain the desired priming of the surface of the polarizer and/or the protective film for better adhesion to each other as well as the desired subsequent crosslinking of the polyvinyl alcohol in the adhesive layer, as taught by Brill.

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5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saiki in view of Brill as applied to claims 1, 3-4, 6, 8-11 above, and further in view of Sugino (US 2003/0137732).

Saiki, as modified by Brill, teaches the polyvinyl alcohol-based adhesive layer for polarizing plates described above. Saiki is silent regarding the thickness of the adhesive layer.

However, Sugino teaches that a polyvinyl alcohol-based adhesive layer for a polarizing plate (polarizer can be bonded to the transparent protective layer, PVA-based adhesive, [0076], polarizing plate, [0077]), more preferably has a thickness from 20 nm to 100 nm ([0076]), which is within the claimed range of from 30 to 300 nm, for the purpose of providing the desired balance of adhesion and minimal optical interference to the polarizing plate.

Therefore, since Saiki is silent regarding the thickness of the adhesive layer, it would have been necessary and hence obvious to have looked to the prior art for suitable values. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the polyvinyl alcohol-based adhesive layer adhering the polarizer and the transparent protective film of Saiki, with a thickness that is within the range of from 30 to 300 nm taught by Sugino, in order to obtain the desired balance of adhesion and minimal optical interference to the polarizing plate.

Response to Arguments

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sophie Hon/

Sow-Fun Hon

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